



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

26

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,068	03/15/2004	Raymond C. Frobosilo	J834-001 US	1269
21706	7590	10/17/2006	EXAMINER	
NOTARO AND MICHALOS 100 DUTCH HILL ROAD SUITE 110 ORANGEBURG, NY 10962-2100			A, PHI DIEU TRAN	
			ART UNIT	PAPER NUMBER
			3637	

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/801,068	FROBOSILO, RAYMOND C.	
	Examiner	Art Unit	
	Phi D. A	3637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 July 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-85 is/are pending in the application.
 4a) Of the above claim(s) 9,44 and 77 is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-8,10-43,45-76 and 78-85 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 - Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 - Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 6/29/06

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application
 6) Other: _____.

Election/Restrictions

1. Applicant's election of specie to figure 33A to claims 1-8, 10-43, 45-76, 78-85 in the reply filed on 7/20/06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the newly submitted drawings are blurry with the details not clearly set forth. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitation of claim 16 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the

drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 28, 84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 part d line 1 " the panels" is indefinite as it is unclear which panels are referred thereto.

Part g line 2 " the interior" is indefinite as it is unclear the " interior" of what is claimed.

Claim 28 is indefinite and redundant as it is claiming the same subject matter as claim 27.

Claim 84 line1 " each slotted portion" is indefinite as it is lacking antecedent basis.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 1, 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310).

Marschak 9figures 1-11) shows a metal building comprising a slab (56) that supports a plurality of walls that are formed of generally vertically oriented metal panels (21), each wall having an outer surface and an inner surface, the metal panels including wall panels having opposing wall panel edge portions (figure 2), the wall panel edge portions of the one panel connecting with edge portions of two other metal panels (figures 10-11), each of the panels having flanged portions (41, 31) extending toward each other, a cover (the roof) that attaches to the walls and shields at least part of the interior, the wall inner surface being defined by a veneer (51) that is connected to the metal panels at the flanges portions, connections that join the panels together being defined by interlocking sections that are Z-shaped (figure 3) and that extend transversely with respect to the wall outer surface, an underlying support (56), the walls supporting a roof, the walls/panels having opposed end portions that attach to respective upper and lower longitudinal beams (55, 60).

Marschak does not show the metal panels including a plurality of metal corner panels having opposing corner edge portions that connect with a pair of wall panels at wall panel edge portions.

Hoefen (figure 3) shows the metal panels(15) including a plurality of metal corner panels (29, 27) having opposing corner edge portions that connect with a pair of wall panels at wall panel edge portions.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's structure to show the metal panels including a plurality of metal corner panels having opposing corner edge portions that connect with a pair of wall panels at wall panel edge portions because it enables the secured attachment together of the panels at the corner as taught by Hoefen.

8. Claims 2, 4, 6-8, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310) as applied to claim 1 above and further in view of Knudson (5526628).

Marschak as modified shows all the claimed limitations except for at least one wall having a window, a plurality of short wall panels being below the window.

Knudson (figure 1) shows at least one wall having a window(26), a plurality of short wall panels being below the window, the wall panels and the window each having a width, the window width being greater than the width of the plurality of short wall panels that are positioned below the window, the door width being greater than the width of a plurality of wall panels that are positioned above the door, a pair of column (figure 1 shows the two columns bounding the frame of the window) that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width (inherently so as the column frames the window pane), each column supporting an end portion of the truss, the width of the window being greater than the combined width of a plurality of the wall panels (2 of the panels in figure 1 below the window 26).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show at least one wall having a window, a

plurality of short wall panels being below the window because it would enable the construction of a window above and close to the ground as taught by Knudson.

Per claim 4, Marschak as modified further shows the wall panels and the window each having a width, the window width being greater than the width of the plurality of short wall panels that are positioned below the window.

Per claim 6, Marschak as modified further shows the wall panels and the window each having a width, the door width being greater than the width of a plurality of wall panels that are positioned above the door.

Per claims 7-8, Marschak as modified further shows a pair of column that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column supporting an end portion of the truss.

9. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310) as applied to claim 1 above and further in view of Knudson (5526628).

Marschak as modified shows all the claimed limitations except for at least one wall having a door.

Knudson (figure 1) shows at least one wall having a door (25).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show at least one wall having a door because having a door within a wall of a housing construction would enable the egress and ingress to and from the housing structure as taught by Knudson, and examiner takes Official

Notice of the well known construction of having a door within a wall of a housing structure to form an egress/ingress.

10. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310) and Knudson (5526628).

Marschak as modified shows all the claimed limitations except for a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions.

Knudson further shows a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions (figures 1, 3-4 shows the frame forming the truss as claimed which supports the window above and below).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions because having a truss forming the supporting structure for the window would provide proper support and holding in place for the window as taught by Knudson.

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310) as applied to claim 1 above and further in view of Knudson (5526628).

Marschak as modified shows all the claimed limitations except for the building having at least one window and at least one door.

Knudson shows a building having at least one door and at least one window.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the building having at least one window and at least one door as taught by Knudson because having window and door would provide egress/ingress to the building for light and human, and is well known in the art of housing construction.

12. Claims 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310) and Knudson (5526628).

Marschak as modified shows all the claimed limitations except for the width of the window being greater than the combined width of a plurality of the wall panels, a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss.

Knudson (figure 1) further shows the width of the window being greater than the combined width of a plurality of the wall panels (two panels), a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns (the columns on the two sides of the window pane) that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width(inherently so as

the column frames the window pane), each column extending downwardly from a position next to a side of the truss.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the width of the window being greater than the combined width of a plurality of the wall panels, a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss because having the width of the window being greater than the combined width of a plurality of the wall panels would enable the construction of a window above and close to the ground as taught by Knudson, having a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss would provide proper support and holding in place for the window while provide for an aesthetic appearance to the housing structure as taught by Knudson.

13. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310).

Marschak as modified shows all the claimed limitations except for each corner having corner panel sections forming an angle of about 90 degrees, the panel sections having different dimensions.

Hoefen further shows each corner having corner panel sections (29,30) forming an angle of about 90 degrees (the angle between 29 and 30), the panel sections (29 and 30) having different dimensions.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show each corner having corner panel sections forming an angle of about 90 degrees, the panel sections having different dimensions because having the angle sections would enable the proper mounting and support for the wall panels as taught by Hoefen.

14. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310) as applied to claim 1 above and further in view of Waizenhofer (3300934).

Marschak as modified shows all the claimed limitations except for a plurality of the metal panels being clad with insulation fastened to the metal panel with nails.

Waizenhofer (figure 2) further shows a plurality of the metal panels (22, 20) being clad with insulation(31) fastened to the metal panel with screws (48).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show a plurality of the metal panels being clad with insulation fastened to the metal panel with nails because having insulation fastened to the metal panel with fastener would provide for the secured fastening of the insulation to the

panel and good insulation for the interior of the wall structure as taught by Waizenhofer, and using nail instead of screws would have been obvious to one having ordinary skill in the art as nail, screws, adhesive, etc... are well known equivalence in securing two structures together.

15. Claims 18-20, 27-32, 36, 67-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388).

Marschak (figures 1-11) shows a metal building comprising an underlying support (56), a plurality of metal walls providing an outer wall surface, the walls supporting a roof, the metal walls connecting at corners, each metal wall being comprised of a plurality of metallic wall panels connected together at panel joints (figure 3), each wall panel having a first section with opposing end portions and second and third sections attached respectively to the first section end portions, each of the second and third sections extending away from the first section and having a Z-shaped portion, each Z-shaped section having a free end portion that carries at least one flange, the flanges (41, 31) of the Z-shaped sections extending toward each other, a header (55) that forms an interface between the wall panels and the underlying support, the header comprising of a plurality of flanges intersecting at generally right angles, one flange extending upwardly, one of the second and third sections having five flat sections (figure 3), the second and third sections having five intersecting sections, a header (55) connected to the top of the wall panels, the walls/panels having opposed end portions that attach to respective upper and lower longitudinal beams (55, 60).

Marschak does not show at least one corner having a Z-shaped portion that interlocks with a Z-shaped portion of a wall panel.

Flachbarth et al shows at least one corner having an L-shaped locking portion that interlocks with an L-shaped portion of a wall panel.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's structure to show at least one corner having a Z-shaped portion that interlocks with a Z-shaped portion of a wall panel because having a Z-shaped portion at the corner to interlock with a Z-shaped portion of the panel would enable the easy consistent attachment of the panels at the corner and the use of same connecting device at the joint between panels and at the joint between a panel and a corner member would enable the easy secured fastening together of different parts as taught by Flachbarth et al.

Per claims 19, 32, Marschak et al as modified shows all the claimed limitations except for the corner having two Z-shaped portions to interlock with two wall panels.

Flachbarth et al discloses a corner having two interlocking device to interlock with two joining panels.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the corner having two Z-shaped portions to interlock with two wall panels because it would enable the corner to connect to panels normally perpendicular to each other as taught by Flachbarth et al.

16. Claims 21-26, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388).

Marschak as modified shows all the claimed limitations except a pair of the flanges extending upwardly.

Flachbarth et al shows a pair of flanges (10, 11) extending upwardly to support the panels.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show a pair of the flanges extending upwardly because the flanges would provide for the mounting and positioning of the panels above the support structure as taught by Flachbarth et al.

Per claims 22-26, Marschak as modified shows all the claimed limitation except for the header having a slotted portion, the slotted portion including a slot in the upwardly extending flange, the header having multiple slotted portions, a panel joint is positioned next to a slotted portion, the interlocking panels extend through slotted portions of the header at a joint.

Flachbarth et al further shows the header having a slotted portion, the slotted portion including a slot in the upwardly extending flange, the header having multiple slotted portions, a panel joint is positioned next to a slotted portion, the interlocking panels extend through slotted portions of the header at a joint.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the header having a slotted portion, the slotted portion including a slot in the upwardly extending flange, the header having multiple slotted portions, a panel joint is positioned next to a slotted portion, the interlocking panels extend through slotted portions of the header at a joint because it enables the proper secured positioning and fastening of the panels to the header as taught by Flachbarth et al.

17. Claims 34-35, 51-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388) as applied to claim 18 or 36 above, and further in view of Waizenhofer (3300934).

Marschak as modified shows all the claimed limitations except for a plurality of the metal panels being clad with insulation fastened to the metal panel with nails.

Waizenhofer (figure 2) further shows a plurality of the metal panels (22, 20) being clad with insulation(31) fastened to the metal panel with screws (48).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show a plurality of the metal panels being clad with insulation fastened to the metal panel with nails because having insulation fastened to the metal panel with fastener would provide for the secured fastening of the insulation to the panel and good insulation for the interior of the wall structure as taught by Waizenhofer, and using nail instead of screws would have been obvious to one having ordinary skill in the art as nail, screws, adhesive, etc... are well known equivalence in securing two structures together.

Per claim 53, Marschak as modified further shows each wall panel having void space in between the second and third sections and the insulation is positioned in the void space, each wall panel having a void space in between the second and third sections and the insulation is positioned in the void space, the insulation is attached to the first section of a wall panel.

18. Claims 37-38, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388) as applied to claim 36 above and further in view of Knudson (5526628).

Marschak as modified shows all the claimed limitations except for the building having at least one window and at least one door.

Knudson shows a building having at least one door and at least one window.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the building having at least one window and at least one door as taught by Knudson because having window and door would provide egress/ingress to the building for light and human, and is well known in the art of housing construction.

19. Claims 39-43, 46-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388) as applied to claim 36, and further in view of Knudson (5526628).

Marschak as modified shows all the claimed limitations except for the width of the window being greater than the combined width of a plurality of the wall panels, a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss.

Knudson (figure 1) further shows the width of the window being greater than the combined width of a plurality of the wall panels (two panels), a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns (the columns on the

two sides of the window pane) that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width(inherently so as the column frames the window pane), each column extending downwardly from a position next to a side of the truss.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the width of the window being greater than the combined width of a plurality of the wall panels, a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss because having the width of the window being greater than the combined width of a plurality of the wall panels would enable the construction of a window above and close to the ground as taught by Knudson, having a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss would provide proper support and holding in place for the window while provide for an aesthetic appearance to the housing structure as taught by Knudson.

Per claim 50, Marschak as modified further shows each corner having corner panel sections forming an angle of about 90 degrees, the panel sections having different dimensions

per the teaching of Flachbarth et al which shows sections (100 and 94 or 74 and 90 forming angle sections).

20. Claims 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310), Waizenhofer (3300934) as applied to claim 16 or 17 and further in view of Kim (4372901).

Marschak as modified shows all the claimed limitations except for the insulation being a laminate that includes metallic and non-metallic portions.

Kim (figure 4) shows an insulation being a laminate that includes a metallic (30) and non-metallic(32) portions.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the insulation being a laminate that includes metallic and non-metallic portions because having a metallic portion would provide strength to the insulation and the non-metallic portion would provide good thermal insulation for the insulation as taught by Kim.

21. Claims 60-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Hoefen (2186310) as applied to claim 1 above and further in view of Bavetz (3956998).

Marschak as modified shows all the claimed limitations except for some of the panels having sections that are configured to inhibit heat transfer, the sections being slotted to inhibit heat transfer.

Bavetz discloses the use of slots on a metal panel to provide good heat insulation for a metal panel between the exterior and interior.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show some of the panels having sections that are configured to inhibit heat transfer, the sections being slotted to inhibit heat transfer because having slots in the panels would provide good thermal insulation between the interior and exterior as taught by Bavetz.

22. Claims 62-65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388) as applied to claim 18 or 36 above and further in view of Bavetz (3956998).

Marschak as modified shows all the claimed limitations except for some of the panels having sections that are configured to inhibit heat transfer, the sections being slotted to inhibit heat transfer.

Bavetz discloses the use of slots on a metal panel to provide good heat insulation for a metal panel between the exterior and interior.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show some of the panels having sections that are configured to inhibit heat transfer, the sections being slotted to inhibit heat transfer because having slots in the panels would provide good thermal insulation between the interior and exterior as taught by Bavetz.

23. Claims 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388).

Marschak (figures 1-11) shows a metal building comprising an underlying support (56), a plurality of metal walls providing an outer wall surface, the walls supporting a roof, the metal

walls connecting at corners, each metal wall being comprised of a plurality of metallic wall panels connected together at panel joints (figure 3), each wall panel having a first section with opposing end portions and second and third sections attached respectively to the first section end portions, each of the second and third sections extending away from the first section and having a Z-shaped portion, each Z-shaped section having a free end portion that carries at least one flange, the flanges (41, 31) of the Z-shaped sections extending toward each other, a header (55) that forms an interface between the wall panels and the underlying support, the header comprising of a plurality of flanges intersecting at generally right angles, one flange extending upwardly, one of the second and third sections having five flat sections (figure 3), the second and third sections having five intersecting sections, a header (55) connected to the top of the wall panels, the walls/panels having opposed end portions that attach to respective upper and lower longitudinal beams (55, 60).

Marschak does not show at least one corner having a Z-shaped portion that interlocks with a Z-shaped portion of a wall panel, the corner connecting with two wall panels, slotted portions on the lower beam that enable part of the wall panel to be positioned inside of the outer flange of the beam and part of the wall panel to be positioned on an outside surface of the outer flange of the beam.

Flachbarth et al shows at least one corner having an L-shaped locking portion that interlocks with an L-shaped portion of a wall panel, slotted portions on the lower beam that enable part of the wall panel to be positioned inside of the outer flange of the beam and part of the wall panel to be positioned on an outside surface of the outer flange of the beam.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's structure to show at least one corner having a Z-shaped portion that interlocks with a Z-shaped portion of a wall panel, the corner connecting with two wall panels, slotted portions on the lower beam that enable part of the wall panel to be positioned inside of the outer flange of the beam and part of the wall panel to be positioned on an outside surface of the outer flange of the beam because it enables the proper secured positioning and fastening of the panels to the header as taught by Flachbarth et al. because having a Z-shaped portion at the corner to interlock with a Z-shaped portion of the panel would enable the easy consistent attachment of the panels at the corner and the use of same connecting device at the joint between panels and at the joint between a panel and a corner member would enable the easy secured fastening together of different parts as taught by Flachbarth et al, and having slotted portions on the lower beam would enable the precise, pre-determined secure and easy mounting attachment of the panels to the beam as the slotted portions provide extra vertical support and surface for the attachment of the panels.

24. Claims 70-71, 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388) as applied to claim 69 above and further in view of Knudson (5526628).

Marschak as modified shows all the claimed limitations except for the building having at least one window and at least one door.

Knudson shows a building having at least one door and at least one window.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the building having at least one

window and at least one door as taught by Knudson because having window and door would provide egress/ingress to the building for light and human, and is well known in the art of housing construction.

25. Claims 72-76, 79-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388) and Knudson (5526628).

Marschak as modified shows all the claimed limitations except for the width of the window being greater than the combined width of a plurality of the wall panels, a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss, the door width being greater than the width of a plurality of the wall panels that are positioned above the door.

Knudson (figure 1) further shows the width of the window being greater than the combined width of a plurality of the wall panels (two panels), a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns (the columns on the two sides of the window pane) that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width(inherently so as the column frames the window pane), each column extending downwardly from a position next to a side of the truss, the door width being greater than the width of a plurality of the wall panels that are positioned above the door.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show the width of the window being greater than the combined width of a plurality of the wall panels, a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss, the door width being greater than the width of a plurality of the wall panels that are positioned above the door because having the width of the window being greater than the combined width of a plurality of the wall panels would enable the construction of a window above and close to the ground as taught by Knudson, having the width of the wall being greater than the width of a plurality of the wall panes positioned above the door would enable the proper mounting and supporting of the panels by the door frame as taught by Knudson, having a truss formed of a plurality of short wall panel sections that are attached above and below to truss beams, the truss having edge portions that connect to wall panel edge portions, a pair of vertical columns that support the truss at positions on opposing sides of the window, the distance between the columns being greater than the window width, each column extending downwardly from a position next to a side of the truss would provide proper support and holding in place for the window while provide for an aesthetic appearance to the housing structure as taught by Knudson.

Per claim 83, Marschak as modified further shows each corner having corner panel sections forming an angle of about 90 degrees, the panel sections having different dimensions

per the teaching of Flachbarth et al which shows sections (100 and 94 or 74 and 90 forming angle sections).

26. Claims 84-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marschak (5117602) in view of Flachbarth et al (3568388) as applied to claim 68 above and further in view of Bavetz.

Marschak as modified shows all the claimed limitations including each longitudinal beam including a web and two spaced apart flanges.

Marschak does not show each slotted portion including a slot on the web and a slot on the flange.

Bavetz discloses the use of slots on a metal panel to provide good heat insulation for a metal panel between the exterior and interior.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Marschak's modified structure to show each slotted portion including a slot on the web and a slot on the flange because having slots in the panels at the flanges and the web would provide good thermal insulation between the interior and exterior as taught by Bavetz.

Conclusion

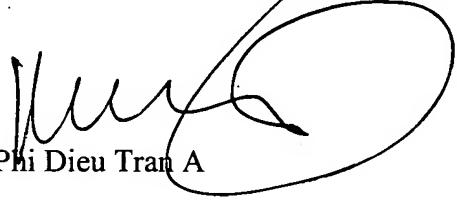
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art shows different metal building designs.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

Art Unit: 3637

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Phi Dieu Tran A

10/12/06